## SECTION XXXVI COMMERCIAL ARCHITECTURE (Added March 2007)

#### I. STATUTORY AUTHORIZATION

- A. RSA Title LXIV, Chapters 674:16, Grant of Power
- B. 674:21, Innovative Land Use Controls

## II. PURPOSES AND APPLICABILITY

## A. General Purposes

- To preserve and enhance the rural, small town character of Newton through architectural design that
  replicates in scale and character the best examples of traditional neighborhood design from the
  historic towns and villages of New England and to create and clearly delineate public and private
  spaces to enhance the quality of life and aesthetic quality of both the residents of the development and
  the town as a whole;
- To promote traditional village building and site development patterns with an interconnected pattern
  of streets, alleys, and lanes, which provides for safe and efficient vehicular travel at a scale consistent
  with the small, rural village setting, and which provides for the connection of those streets to existing
  and future developments;
- 3. To protect environmental resources and to preserve scenic vistas, agricultural areas, and unique natural features of the landscape;
- 4. To provide for pedestrian and bicycle travel throughout the development through the creation of sidewalks, paths, and bicycle paths;
- 5. To promote the use of neighborhood greens, pocket parks, landscaped streets, and access to greenspace to provide space for recreation and social activity, and to provide visual enjoyment;
- 6. To provide a mix of housing styles, types, and sizes, to accommodate households of all ages, sizes, and incomes;
- 7. To provide buildings for civic assembly and neighborhood activities that promote the development of social networks and community and provide a visual focal point for the village subdivision; and
- 8. To promote the management of growth and the implementation of innovative land use controls consistent with RSA 674 in order to protect environmental resources, control sprawl, reduce traffic congestion, and enhance the sense of community of new developments and redeveloped areas.

## B. Applicability.

- 1. The standards in this section are applicable within the Commercial District(s), whose location and boundaries have been selected to be consistent with policies in the Master Plan.
- 2. The standards in this section are also applicable to any proposed change of use or expansion of use for commercial properties outside of the Commercial District(s).

## III. COMMERCIAL DESIGN STANDARDS

- A. Architectural Design Standards
  - 1. General. The following architectural design standards shall apply to all structures.
  - 2. Buildings.

a) Scale and Style. Buildings shall generally relate in scale and design features to the surrounding buildings, showing respect for the local context, except however, where existing development does not represent a consistent architectural style or does not incorporate a building design that reflects the rural character and architecture of New England towns, buildings should instead be designed to improve the overall streetscape,



Figure 1. Scale and Style

relying on the design standards set forth in this ordinance.

b) As a general rule, buildings shall reflect a continuity of treatment obtained by maintaining the building scale or by subtly graduation changes, by maintaining small front setbacks, by continuous use of front porches on residential buildings, by maintaining cornice lines in buildings of the same height, by extending horizontal lines of fenestration, and by echoing architectural styles, details, design themes, building materials, and colors used in surrounding buildings where such buildings represent the rural character and architecture of New England towns.



Figure 2. Corner Lots

- c) Corner Lots. Buildings on corner lots shall be considered significant structures, given that they have at least two front facades visibly exposed to the street. If deemed appropriate by the planning board in its design review, such buildings may be designed with additional height and architectural embellishments, such as corner towers, steeples, or other features to emphasize their location and serve as a visual focal point for the area.
- d) Walls and Planes. Buildings shall avoid long, monotonous uninterrupted walls or roof planes. Offsets including projections, recesses, and changes in floor level shall be used in order to add architectural interest and variety, and to relieve the visual effect of a simple, long wall. Similarly, roof-line offsets shall be provided, in order to provide architectural

interest and variety to the massing of a building and to relieve the effect of a single, long roof. Flat roofs should be avoided in favor of pitched roofs.

- e) Buildings with more than one façade facing a public street or internal open space shall be required to provide multiple front façade treatments.
- f) The architectural treatment of the front façade shall be continued, in its major features, around all visibly exposed sides of a building. All sides of a building shall be architecturally designed to be consistent with regard to style, materials, colors, and details. Bland wall or service area treatment of side and or rear elevations visible from the public viewshed is discouraged.
- g) Base Course and Cornice. All visibly exposed sides of a building shall have an articulated base course and cornice. The base course shall align with either the kickplate or sill level of



Figure 4. Cornice and Base

the first story. The cornice shall terminate or cap the top of a building wall, may project horizontally from the vertical building wall plane, and may be ornamented with moldings, brackets, and other details. The middle section of a building may be horizontally divided at the floor, lintel, or sill levels with belt or string course.



Figure 5. Roofs

h) Roofs. Gable roofs with a minimum pitch of 9/12 should be used to the greatest extent possible. Where hipped roofs are used, it is recommended that the minimum pitch be 6/12.

Both gable and hipped roofs should provide overhanging eaves on all sides that extend a minimum of one root beyond the building wall. Flat roofs should be avoided on one-story buildings, but may be used on buildings with a minimum of two stories, provided that all visibly exposed walls shall have an articulated cornice which projects horizontally from the vertical building wall plane. Other roof types should be appropriate to the building's architecture. Mansard roofs are generally discouraged, particularly on buildings less than three stories in height. Architectural embellishments that add visual interest to roofs, such as dormers, belvederes, masonry chimneys, cupolas, clock towers, and other similar elements are encouraged.

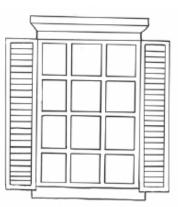


Figure 6. Windows

- i) Windows/fenestration. Fenestration shall be architecturally compatible with the style, materials, colors, and details of the building, and appropriate to a rural New England setting. Windows shall be vertically proportioned wherever possible. To the extent possible, upper story windows shall be vertically aligned with the location of windows and doors on the ground level, including storefront or display windows. Blank, windowless walls are discouraged. Storefronts are an integral part of building and shall be integrally designed with the upper floors to be compatible with the overall façade character. Ground floor retail, service, and restaurant uses should have large pane display windows, framed by the surrounding wall, and shall not exceed 75 percent of the total ground level façade area.
- j) Entrances. All entrances to a building shall be defined and articulated by architectural elements such as lintels, pediments, pilasters, columns, porticoes, porches, overhangs, railings, balustrades, and others, where appropriate. Any such element utilized shall be consistent with the style, materials, colors, and details of the building as a whole, as shall the doors. Awnings are permitted where they compliment the building's architectural style.
- k) Light fixtures. Light fixtures attached to the exterior of a building shall be architecturally compatible with the style, materials, colors, and details of the building and shall comply with local building codes. The type of light source used on the exterior of buildings, signs, parking areas, pedestrian walkways, and other areas of a site, and the light quality produced, shall be the same or compatible. Facades shall be lit from the exterior, and, as a general rule, lights should be concealed through shielding or recessed behind architectural features. The use of low-pressure sodium, fluorescent, or mercury vapor lighting either attached to buildings or to light the exterior of buildings shall be prohibited. Mounting brackets and associated hardware should be inconspicuous.

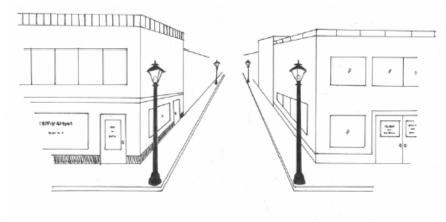


Figure 7. Street lights

- Lighting. Street lights shall be decorative and shall blend with the architectural style of the community. Along all commercial or mixed-use streets, parking areas, sidewalks, walkways, courtyards, community greens, and interior open spaces, decorative light posts shall be provided at regular intervals. Posts shall be spaced at no greater than 80 feet on center on both sides of a commercial or main street. Light posts should be at least ten feet high. In parking areas, post heights may extend to a maximum of sixteen feet. Wall-mounted light design shall be incorporated into the street lighting design.
- m) Air conditioners and other fixtures. All air conditioning units, HVAC systems, exhaust pipes or stacks, elevator housing, dumpsters, propane/fuel tanks, transformers, satellite dishes, and other telecommunications receiving devices shall be thoroughly screened from view from the public right-of-way and from adjacent properties by using walls, fencing, roof elements, or landscaping. In no case will chain-link fencing be permitted for screening.
- n) Fire escapes. Fire escapes shall not be permitted on a building's front façade. In buildings requiring a second means of egress pursuant to the local building codes, internal stairs or other routes of egress shall be used.
- o) Security. Solid metal security gates or solid roll-down metal windows shall not be permitted. Link or grill type security devices shall be permitted only if installed from the inside, within the window or door frames. Security grilles shall be recessed and concealed during normal business hours.
- B. Signs
  - General. All signs within a new development must conform to the following requirements. All signs
    within a development must be consistent with the overall design of the development, and should be
    constructed of wood, granite, painted cast metal, bronze, brass, or other material consistent with the
    materials used in the building's façade or fixtures. Plastic panel rear-lighted signs are not permitted.
    Billboards are not permitted. Signs employing mercury vapor, low pressure and high-pressure
    sodium, and metal halide lighting are not permitted.
  - 2. Design. Unique and interesting designs are encouraged in the lettering and graphics of each sign. Signs may be attached to the building and project outward from the wall so long as the sign does not project outward from the wall to which it is attached more than eighteen inches. Projecting signs must be no larger than four square feet. Projecting signs must be at least ten feet above the ground. Signs attached to the front façade shall not exceed the dimensions of the façade.

- 3. Height. The maximum permitted height of signs is fifteen feet above the front sidewalk elevation, and shall not extend above the base of the second floor windowsill, parapet, eave, or building façade.
- 4. Freestanding signs shall only be permitted where the business is not attached to any other buildings. All freestanding signs must be no larger than four feet in height and no greater than six feet in width. Freestanding signs constructed of natural materials such as granite or wood are encouraged.
- 5. Signs that list more than one business shall not be permitted except in instances where a building contains multiple businesses or offices that are not distinguishable from the street.
- 6. Street address numbers shall be clearly marked in any new development and included in the design of the front façade or signage of individual buildings.
- 7. Company logos that contain bright or garish colors or designs shall be muted to harmonize with the overall color scheme and design of the development.

## C. Landscaping

- 1. All developments must contain a landscaping plan that lists the location, species, and suitability of plant species to the site.
- 2. Existing trees and other features of the land shall be protected in the development of the site to the greatest extent feasible.
- 3. Where merited, trees shall be planted to enhance public spaces, open spaces, and streetscapes. The Planning Board will meet with the developer's landscape architect to review the landscape plan and suggest any appropriate landscaping improvements to the site to enhance the development consistent with the landscape requirements mentioned elsewhere in this ordinance.

## D. Parking

- 1. All parking for commercial areas must be on-street or in the rear of buildings.
- 2. Rear parking areas shall be landscaped with a line of low shrubs or suitable foliage every two rows of spaces.

Drawings within this ordinance provided by David West and Jill Robinson, Rockingham Planning Commission

## SECTION XXXVII SMALL WIND ENERGY SYSTEMS (Added March 2009)

## A. Purpose:

This small wind energy systems ordinance is enacted in accordance with RSA 674:21, Innovative Land Use Controls, and the purposes outlined in RSA 672:1-III-a and RSA 674:13-I(j). The purpose of this ordinance is to accommodate distributed generation/small wind energy systems in appropriate locations, while minimizing any adverse visual, safety and environmental impacts of the system. In addition, this ordinance provides a permitting process for small wind energy systems to ensure compliance with the provisions of the requirements and standards established herein.

#### B. Definitions:

**Fall zone**: The potential fall area for the small wind energy system. It is measured by using 110% of the total height as the radius around the center point of the base of the tower.

Flicker: The moving shadow created by the sun shining on the rotating blades of the wind turbine.

**Meteorological tower (met tower):** Includes the tower, base plate, anchors, guy wires and hardware, anemometers and vanes, data loggers, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind

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flow characteristics over a period of time for either instantaneous wind information or to characterize the wind resource at a given location.

**Net metering:** The difference between the electricity supplied over the electric distribution system and the electricity generated by the small wind energy system which is fed back into the electric distribution system over a billing period.

**Power grid**: The transmission system, managed by ISO New England, created to balance the supply and demand of electricity for consumers in New England.

Shadow: The outline created on the surrounding area by the sun shining on the small wind energy system.

**Small wind energy system**: A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of 60 kilowatts or less and will be used primarily for onsite consumption.

**Tower**: The monopole or guyed monopole structure that supports a wind turbine.

Total height: The vertical distance from ground level to the tip of the wind turbine blade when it is at its highest point.

**Tower height**: The height above grade of the fixed portion of the tower, excluding the wind turbine.

**Wind turbine**: The blades and associated mechanical and electrical conversion components mounted on top of the tower whose purpose is to convert kinetic energy of the wind into rotational energy used to generate electricity.

## C. Applicability:

- 1. Small Wind Energy System: Small wind energy systems shall be permitted under a conditional use permit as an innovative land use control pursuant to RSA 674:21 in all zoning districts where structures of any sort are allowed.
- Approval: No small wind energy system shall be erected, constructed, installed or modified without first
  receiving a conditional use permit from the Planning Board, as outlined in section D. All small wind
  energy systems installed prior to the enactment of this ordinance are exempt from the conditions herein.

## D. Procedure for Review:

- 1. Conditional Use Permit: In accordance with RSA 674:21, a small wind energy system shall be subject to receiving a conditional use permit prior to installation or modification thereof. The issuance of a conditional use permit shall abide with the following requirements:
  - a. Building Permit: A building permit shall be required for the installation or modification of a small wind energy system.
  - b. Site Plan Review: Prior to issuance of a building permit, a site plan shall be submitted to the Planning Board for review. The applicant shall follow the procedural requirements of the site plan review regulations, RSA 674:62- Regional Notification for Small Wind Energy Systems and RSA 676:4- Board's Procedures on Plats. The site plan shall include the following:
    - i) Property lines and physical dimensions of the applicant's property.
    - ii) Location, dimensions, and types of existing major structures on the property.

- iii) Location of the proposed small wind energy system, foundations, guy anchors and associated equipment
- iv) Setback requirements as outlined in this ordinance.
- v) The right-of-way of any public road that is contiguous with the property.
- vi) Any overhead utility lines.
- vii) Small wind energy system specifications, including manufacturer, model, rotor diameter, tower height, tower type (freestanding or guyed).
- viii) If the small wind energy system will be connected to the power grid, documentation shall be provided regarding the notification of the intent with the utility regarding the applicant's installation of a small wind energy system.
- ix) Tower foundation blueprints or drawings.
- x) Tower blueprint or drawings.
- xi) Sound level analysis prepared by the wind turbine manufacturer or qualified engineer.
- xii) Electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code (usually provided by the manufacturer).
- xiii) Estimated costs of physically removing the small wind energy system to comply with surety standards.
- xiv) Evidence of compliance or non-applicability with Federal Aviation Administration requirements.
- xv) The site plan must be stamped by a professional engineer licensed to practice in the state of New Hampshire.
- 2. Meteorological (Met) Towers: The construction of a met tower for the purpose of collecting data to develop a small wind energy system, shall abide with the following requirements;
  - a. The construction, installation or modification of a met tower shall require a building permit and shall conform to all applicable sections of the state building code.
  - b. Met towers shall be permitted on a temporary basis not to exceed 3 years.
  - c. Met towers shall adhere to the small wind energy system standards.
  - d. A conditional use permit is not required to construct, install or modify a met tower. Prior to the issuance of a building permit, the building inspector shall ensure the met tower complies with the small wind energy system standards.
- E. Conditional Use Permit Standards:

1. Through the conditional use permit review process, the small wind energy system shall be evaluated for compliance to the following standards;

#### a. Setbacks:

- i) Small wind energy system shall be set back a distance equal to 110% of the total height from:
  - A) Any public road right-of-way, unless written permission is granted by the governmental entity with jurisdiction over the road.
  - B) Any overhead utility lines.
  - C) All property lines, unless the affected land owner provides written permission through a recorded easement allowing the small wind energy system's fall zone to overlap with the abutting property.
  - D) Any travel ways to include but not be limited to driveways, parking lots, nature trails or sidewalks.
- ii) If an abutting landowner disapproves of the proposed small wind energy system, the said system shall be set back a distance equal to 220% of the total height from all property lines.
- iii) Small wind energy systems must meet all setbacks for principal structures for the zoning district in which the system is located.
- iv) The setback shall be measured to the center of the tower's base.
- v) Guy wires used to support the tower are exempt from the small wind energy system setback requirements.

### b. Tower:

- i) Wind turbines may only be attached to freestanding or guy wired monopole towers. Lattice towers are explicitly prohibited.
- ii) The tower height shall not exceed 150 feet.
- iii) The applicant shall provide evidence that the proposed tower height does not exceed the height recommended by the manufacturer of the wind turbine.

Sound Level: The small wind energy system shall not exceed 60 decibels using the A scale (dBA), as measured at the property line, except during short-term events such as severe wind storms and utility outages.

- d. Shadowing/Flicker: Small wind energy systems shall be sited in a manner that does not result in significant shadowing or flicker impacts. The applicant has the burden of proving that this effect does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.
- e. Signs:

- All signs, both temporary and permanent, are prohibited on the small wind energy system, except as follows:
  - A) Manufacturer's or installer's identification on the wind turbine.
  - B) Appropriate warning signs and placards.
- f. Code Compliance: The small wind energy system shall comply with all applicable sections of the New Hampshire State Building Code.
- g. Aviation: The small wind energy system shall be built to comply with all applicable Federal Aviation Administration including but not limited to 14 C.F.R. part 77, subpart B regarding installations close to airports, and the New Hampshire Aviation regulations, including but not limited to RSA 422-b and RSA 424. Evidence of compliance or non-applicability shall be submitted with the application.
- h. Visual Impacts: It is inherent that small wind energy systems may pose some visual impacts due to the tower height needed to access the wind resources. The purpose of this section is to reduce the visual impacts, without restricting the owner's access to the wind resources.
  - i) The applicant shall demonstrate through project site planning and proposed mitigation that the small wind energy system's visual impacts will be minimized for surrounding neighbors and the community. This may include, but not be limited to information regarding site selection, turbine design or appearance, buffering, and screening of ground mounted electrical and control equipment. All electrical conduits shall be underground.
  - ii) The color of the small wind energy system shall either be the stock color from the manufacturer or painted with a non-reflective, unobtrusive color that blends in with the surrounding environment.
  - iii) A small wind energy system shall not be artificially lit unless such lighting is required by the Federal Aviation Administration (FAA). If lighting is required, the applicant shall provide a copy of the FAA determination to establish the required markings and/or lights for the small wind energy system.
  - Utility Connection: If the proposed small wind energy system is to be connected to the power grid through net metering, it shall adhere to RSA 362-A:9.

## Access:

- All ground mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
- ii) The tower shall be designed and installed so as to not provide step bolts or a ladder readily accessible to the public for a minimum height of 8 feet above the ground.
- k. Approved Wind Turbines: The manufacturer and model of the wind turbine to be used in the proposed small wind energy system must have been approved by the California Energy Commission or the New York State Energy Research and Development Authority, or a similar list approved by the state of New Hampshire, if available.

1. Clearing: Clearing of natural vegetation shall be limited to that which is necessary for the construction, operation and maintenance of the small wind energy system and as otherwise prescribed by applicable laws, regulations, and ordinances.

## F. <u>Abandonment</u>:

- At such time that a small wind energy system is scheduled to be abandoned or discontinued, the applicant will notify the Building Inspector by certified U.S. mail of the proposed date of abandonment or discontinuation of operations.
- 2. Upon abandonment or discontinuation of use, the owner shall physically remove the small wind energy system within 90 days from the date of abandonment or discontinuation of use. This period may be extended at the request of the owner and at the discretion of the Building Inspector. "Physically remove" shall include, but not be limited to:
  - a. Removal of the wind turbine and tower and related above grade structures.
  - b. Restoration of the location of the small wind energy system to its natural condition, except that any landscaping, grading or below-grade foundation may remain in the after-conditions.
- 3. In the event that an applicant fails to give such notice, the system shall be considered abandoned or discontinued if the system is out-of-service for a continuous 12-month period. After the 12 months of inoperability, the Building Inspector may issue a Notice of Abandonment to the owner of the small wind energy system. The owner shall have the right to respond to the Notice of Abandonment within 30 days from Notice receipt date. The Building Inspector shall withdraw the Notice of Abandonment and notify the owner that the Notice has been withdrawn if the owner provides information that demonstrates the small wind energy system has not been abandoned.
- 4. If the owner fails to respond to the Notice of Abandonment or if after review by the Building Inspector it is determined that the small wind energy system has been abandoned or discontinued, the owner of the small wind energy system shall remove the wind turbine and tower at the owner's sole expense within 3 months of receipt of the Notice of Abandonment. If the owner fails to physically remove the small wind energy system after the Notice of Abandonment procedure, the town shall have the authority to enter the subject property and physically remove the small wind energy system.
- 5. The Planning Board may require the applicant to provide a form of surety (i.e., post a bond, letter of credit or establish an escrow account or other) at the time of construction to cover costs of the removal in the event the town must remove the facility. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer. The amount shall include a mechanism to accommodate the rate of inflation over 15 years.

### G. Violation:

It is unlawful for any person to construct, install, or operate a small wind energy system that is not in compliance with this ordinance or with any condition contained in the site plan review issued pursuant to this ordinance. Small wind energy systems installed prior to the adoption of this ordinance are exempt.

#### H. Penalties:

Any person who fails to comply with any provision of this ordinance or a building permit issued pursuant to this ordinance shall be subject to enforcement and penalties as allowed by NH Revised Statutes Annotated Chapter 676.

# I. <u>Waiver Provisions</u>:

The Planning Board may waive any portion of this ordinance in such cases where, in the opinion of the Planning Board, strict conformity would pose an unnecessary hardship to the applicant and waiver would not be contrary to the spirit and intent of this ordinance.

